

CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A battery pack comprising: a plurality of prismatic rechargeable batteries, each of which is formed by accommodating an electrode assembly and a liquid electrolyte in a battery case and sealing an open end of the case with a sealing plate, an electrode terminal being provided in the sealing plate; a circuit substrate formed with a battery management circuit for managing the operating state of each rechargeable battery; and a pack case for accommodating the rechargeable batteries and the circuit substrate, wherein:

the plurality of rechargeable batteries are held by a frame in such an arrangement that the batteries are oriented in the same direction on their sealing-plate side, whereby the plurality of rechargeable batteries are integrated; the circuit substrate is mounted to the frame for holding the sealing-plate side of the plurality of rechargeable batteries; and a resin mold is provided for covering a necessary surface of the circuit substrate with a resin after the circuit substrate is electrically connected to the rechargeable batteries and to input and output terminals; and

the plurality of rechargeable batteries are surrounded by the frame, the frame including a center frame having battery accommodating parts that hold center parts of the batteries and arrange the rechargeable batteries in parallel spaced relationship; a bottom frame having bottom accommodating parts that receive bottoms of the rechargeable batteries; and a terminal side frame attached to the circuit substrate and having sealing part accommodating parts that receive sealing plate sides of the rechargeable batteries.

2. (Currently Amended) A battery pack comprising: a plurality of rechargeable batteries, each of which is formed by accommodating an electrode assembly and a liquid electrolyte in a battery case and sealing an open end of the case with a sealing plate, an electrode terminal being provided in the sealing plate; a circuit substrate formed with a battery management circuit for managing the operating state of each rechargeable battery; and a pack case for accommodating the rechargeable batteries and the circuit substrate, wherein:

the plurality of rechargeable batteries are held by a frame in such an arrangement that the batteries are oriented in the same direction on their sealing-plate side; the plurality of rechargeable batteries are connected in series and/or parallel by joining connection plates to the electrode terminals of each rechargeable battery; and the circuit substrate is mounted such that connection projections formed to the connection plates are inserted into connection holes of the circuit substrate so that the connection projections are joined to the circuit substrate; and

the plurality of rechargeable batteries are surrounded by the frame, the frame including a center frame having battery accommodating parts that hold center parts of the batteries and arrange the rechargeable batteries in parallel spaced relationship; a bottom frame having bottom accommodating parts that receive bottoms of the rechargeable batteries; and a terminal side frame attached to the circuit substrate and having sealing part accommodating parts that receive sealing plate sides of the rechargeable batteries.

3. (Previously Presented) The battery pack according to claim 1, wherein the rechargeable batteries are formed in a flat prismatic shape and held by the frame in parallel spaced relationship, largest flat surfaces of the batteries being directed opposite each other.

4. (Original) The battery pack according to claim 1, wherein the resin mold covers a surface on which electronic components are mounted, including electrically conductive parts.

5. (Previously Presented) The battery pack according to claim 1, wherein the resin mold is formed by filling a resin in a recess in which the circuit substrate is accommodated to cover the circuit substrate, the recess being located in the frame on the side of the sealing plate.

6. (Previously Presented) The battery pack according to claim 2, wherein the rechargeable batteries are formed in a flat prismatic shape and held by the frame in parallel spaced relationship, largest flat surfaces of the batteries being directed opposite each other.

7. (Currently Amended) A battery pack comprising: a plurality of prismatic rechargeable batteries, each of which is formed by accommodating an electrode assembly and a liquid electrolyte in a battery case and sealing an open end of the case with a sealing plate, an electrode terminal being provided in the sealing plate; a circuit substrate formed with a battery management circuit that manages the operating state of each rechargeable battery; and a pack case that accommodates the rechargeable batteries and the circuit substrate, wherein:

the plurality of rechargeable batteries are held by a frame in such an arrangement that the batteries are oriented in the same direction on their sealing-plate side, whereby the plurality of rechargeable batteries are integrated; the circuit substrate is mounted to the frame and holds the sealing-plate side of the plurality of rechargeable batteries; and a resin mold is provided that covers a necessary surface of the circuit substrate with a resin after the circuit substrate is electrically connected to the rechargeable batteries and to input and output terminals; and

the plurality of rechargeable batteries are surrounded by the frame, the frame including a center frame having battery accommodating parts that hold center parts of the batteries and arrange the rechargeable batteries in parallel spaced relationship; a bottom frame having bottom accommodating parts that receive bottoms of the rechargeable batteries; and a terminal side frame attached to the circuit substrate and having sealing part accommodating parts that receive sealing plate sides of the rechargeable batteries.

8. (Currently Amended) A battery pack comprising: a plurality of rechargeable batteries, each of which is formed by accommodating an electrode assembly and a liquid electrolyte in a battery case and sealing an open end of the case with a sealing plate, an electrode terminal being provided in the sealing plate; a circuit substrate formed with a battery management circuit that manages the operating state of each rechargeable battery; and a pack case that accommodates the rechargeable batteries and the circuit substrate, wherein:

the plurality of rechargeable batteries are held by a frame in such an arrangement that the batteries are oriented in the same direction on their sealing-plate side; the plurality of rechargeable batteries are connected in series and/or parallel by joining connection plates to the electrode terminals of each rechargeable battery; and the circuit substrate is mounted such that connection projections formed to the connection plates are inserted into connection holes of the circuit substrate so that the connection projections are joined to the circuit substrate; and

the plurality of rechargeable batteries are surrounded by the frame, the frame including a center frame having battery accommodating parts that hold center parts of the batteries and arrange the rechargeable batteries in parallel spaced relationship; a bottom frame having bottom accommodating parts that receive bottoms of the rechargeable batteries; and a terminal side

frame attached to the circuit substrate and having sealing part accommodating parts that receive sealing plate sides of the rechargeable batteries.

9. (Previously Presented) The battery pack according to claim 7, wherein the rechargeable batteries are formed in a flat prismatic shape and held by the frame in parallel spaced relationship, largest flat surfaces of the batteries being directed opposite each other.

10. (Previously Presented) The battery pack according to claim 7, wherein the resin mold covers a surface on which electronic components are mounted, including electrically conductive parts.

11. (Previously Presented) The battery pack according to claim 7, wherein the resin mold is formed by filling a resin in a recess in which the circuit substrate is accommodated to cover the circuit substrate, the recess being located in the frame on the side of the sealing plate.

12. (Previously Presented) The battery pack according to claim 8, wherein the rechargeable batteries are formed in a flat prismatic shape and held by the frame in parallel spaced relationship, largest flat surfaces of the batteries being directed opposite each other.